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Foot health problems When to refer to a podiatrist

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Foot health problems – when to refer to a podiatrist

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Key learning points:

- Primary care nurses can play a significant role in the identification of foot health problems that need further assessment and treatment by a podiatrist.
- Good communication and liaison between primary care nurses and podiatrists is important to maintain high standards of care.
- Particularly in people with diabetes it is essential to assess both feet at each visit and to refer and act fast if any problems are detected.

Introduction

Although our feet are essential for our balance, weight bearing and mobility, we have a tendency to ignore them and to take them for granted. This is until something goes wrong with them. Problems with our feet will not only affect our general feeling of well-being but, particularly in the elderly, if these problems lead to falls[1] and impaired mobility it can be the difference between being independent or being dependent on others[2] . Foot health problems can be minor (such as dry skin, long and healthy toe nails) which can be cared for by nurses using basic foot care or they can be more complicated (such as thickened toe nails, corns, diabetic ulceration) where more specialist (e.g. podiatrist) care is needed. This article aims to discuss some of the most common foot health problems primary care nurses in the community might come across, to help nurses identify these conditions and to indicate when a referral to a podiatrist is needed.

Foot health problems

Foot health problems can be broadly classified as being: (i) orthopaedic, (ii) skin and nails, and (iii) systemic in origin[3].

Orthopaedic deformities

The most often reported foot structural deformities seen are bunions (hallux valgus) and smaller toe deformities such as hammer toes[4]. These deformities lead to bony prominences at the joints which are very susceptible to pressure, particularly from shoes. To prevent, or reduce, the shoe pressure on these bony prominences, which can result in the formation of painful callus and corns, it is important to advice the patient to wear sensible shoes that will keep their feet securely in place but which will still provide enough room for their toes to move in. If this still does not help, a referral to a podiatrist is needed who may recommend special exercises, special custom-made shoes and/or orthoses and ultimately may refer the patient for podiatric surgery to correct the underlying deformity[5].

Skin and nail problems

The most common podiatric skin problems that nurses will come across are callus (hard skin) and corns. The formation of callus is a normal protective reaction of the skin to repeated pressure and friction. However, when the callus becomes too thick

and painful it exceeds its protective function and, as it causes increased pressure on the underlying tissues potentially leading to ulcers, it will need to be reduced. Corns also develop as a result of pressure and friction but are usually found over bony prominences such as joints. They are almost always painful and can become infected. Over-the-counter remedies such as corn plasters are not recommended (especially if patients are elderly or diabetic) as they are ineffective and contain acids which can burn healthy skin[2]. The removal of callus or corns should always be done by a registered podiatrist as it is a skilled treatment using a sharp blade which, if carried out incorrectly, can lead to further problems. Podiatrists can also apply padding and provide insoles to redistribute pressure for long term relieve[5].

A skin foot problem more commonly seen in children, teenagers and young adults are verrucae. Verrucae are warts which commonly occur on the soles of the feet and the toes and are caused by the Human Papilloma virus. This virus is highly contagious and thrives in moist, damp environments such as swimming pools and communal shower areas. Verrucae appear as small cauliflower type growths with tiny black dots which can easily spread into a cluster of small warts. They can be distinguished from corns as pinching or squeezing them elicits pain while corns are painful when direct pressure is applied but not when they are pinched. They often disappear in children on their own accord within six months (as a result of the body's immune system fighting the viral infection), although it can take longer (up to two years) for adults[5]. If the verrucae are not painful the advice would be to cover them up with a plaster and leave them alone, as some treatments can be painful, produce side-effects and can be difficult to administer to children. If the verrucae however are painful, or are spreading, there are self-treatments available from the local pharmacist but, as these often contain salicylic acid which can damage healthy tissues, it is essential that the instructions are carefully followed. If the self-treatment is not working and/or problems arise, such as the surrounding area becoming red and inflamed, the self-treatment should be immediately stopped and a podiatrist should be seen. Most importantly, if the patient has diabetes, poor circulation, is pregnant or has any other condition affecting their feet or immune system, they should never treat the verrucae themselves and be referred to a podiatrist[5].

A common nail condition representing approximately 20% of all nail disorders is onychomycosis, which is a fungal infection of the nails. The infected toenails tend to be thickened, white or brown-yellow discoloured and are often 'brittle' with brown-yellow 'debris' under the nail bed. This condition is almost always found in adults[3]. To reduce thickened nails referral to a podiatrist is essential, particularly in patients with diabetes and neuropathy or patients with impaired vision, as incorrect nail cutting can lead to tissue loss and secondary infection[6]. A nail condition more commonly found in younger people is ingrown toenails. In this condition a toenail pierces the flesh of the toe, often due to poor nail cutting, leading to inflammation and, in more severe cases, infection. If an infection is present referral to a GP for antibiotics is needed. This condition can be extremely painful and often affects the big toe but not always. One should never attempt to remove the ingrowing spike of nail yourself, particularly if the patient has diabetes, is taking steroids or is using anti-coagulants. Referral to a podiatrist is needed for further assessment and, if needed, the podiatrist might carry out minor nail surgery under local anaesthetics to permanently remove the offending part of the nail[5].

Arthritis and foot health

The two most common types of arthritis are osteoarthritis and rheumatoid arthritis. Osteoarthritis is often called the 'wear and tear' arthritis. As the joint cartilage deteriorates (either due to injury damage, infection, overuse or age), it leads to pain, swelling and stiffness (reduced range of motion) of the joint. Although any of the 33 joints in the feet can be affected it most commonly affects the joints at the base of the big toes[2]. Unlike osteoarthritis which is caused by 'wear and tear', rheumatoid arthritis is a chronic inflammatory autoimmune condition affecting particularly the joints in the hands, feet, wrists, ankles and knees leaving them swollen, painful and stiff. Additional symptoms these patients might experience include muscle aches, anaemia and flu-like symptoms[7]. The smaller joints in the feet and hands are often the first ones that are being affected by the disease, often leading to joint deformities. Due to the increase in pressure on the deformed joints in the feet, and a reduced ability to shock absorb during walking, further problems often develop such as painful corns, callus and even ulcers[5]. Walking becomes increasing difficult and painful for these patients. For both types of arthritis a podiatrist can make walking less painful by relieving the pressure and friction on the joints through the use of custom made orthoses, shoe advice and modification, and referral for podiatric surgery if needed. They can also treat any secondary problems caused by the foot deformities such as ulcers and corns[5].

Diabetes and foot health

Diabetes is one of the most chronic and prevalent conditions in the UK. It is estimated that by 2025 more than five million people in the UK alone will have diabetes and that, of those patients, as high as 10% will develop at least one foot ulcer in their lifetime. The most feared and costly consequence of foot ulceration is amputation, with diabetic foot ulcers preceding more than 80% of lower limb amputations in people with diabetes. The mortality rates following amputation due to diabetic foot ulceration are high, with approximately 70% of people dying within five years[8]. The reasons for these high rates of diabetic foot ulcer development are that patients with diabetes often suffer, as a consequence of their disease, from peripheral neuropathy (loss of sensation in the feet) and peripheral vascular disease (poor blood supply to the feet)[2]. Consequently these patients will not be aware of any injury to their feet and the resulting wound will be slow to heal (with any infection spreading quickly) due to the poor blood supply to that region.

As a significant number of people with diabetes receive care in the community, primary care nurses are perfectly positioned to identify patients who have an increased risk of developing diabetes related complications, to refer patients when required and to educate patients about foot care[9]. Upon diagnosis all people with diabetes should have had their feet thoroughly assessed and been referred for podiatry care, with low risk patients receiving annual assessment by a podiatrist[8]. However, as risk status can rapidly change as the disease progresses it is important for nurses to assess patients' feet at each visit. This assessment should consist of checking the pulses and the sensation in the feet; to check the skin's temperature, colour and integrity; to notice signs of infection and/or inflammation; to notice the presence of nail changes and/or any skin lesions, such as corns and callus, and whether any foot deformities are present; as well as checking the patient's footwear to ensure that it is suitable and does not cause any pressure on the feet[10]. If there are any signs of ulceration with fever or any signs of sepsis; ulceration with limb ischaemia; any clinical concern there may be a deep-seated soft tissue or bone

infection or signs of gangrene, the patient will need to be immediately referred to acute services. For all other diabetic foot problems the patient need to be referred to the foot protection service which is led by a podiatrist specialised in diabetic foot problems[8].

Conclusion

Primary care nurses are ideally placed, and play a major role, in identifying foot health problems in community patients that might need further assessment and treatment by a podiatrist. Through early recognition and referral nurses can greatly influence and improve the quality, and sometimes length of life, of their patients.

Resources

Arthritis Research UK - http://www.arthritisresearchuk.org/

National Institute for Health and Care Excellence guidelines (NG19) for diabetic foot problems: prevention and management - https://www.nice.org.uk/guidance/ng19

The College of Podiatry - http://www.scpod.org/#

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